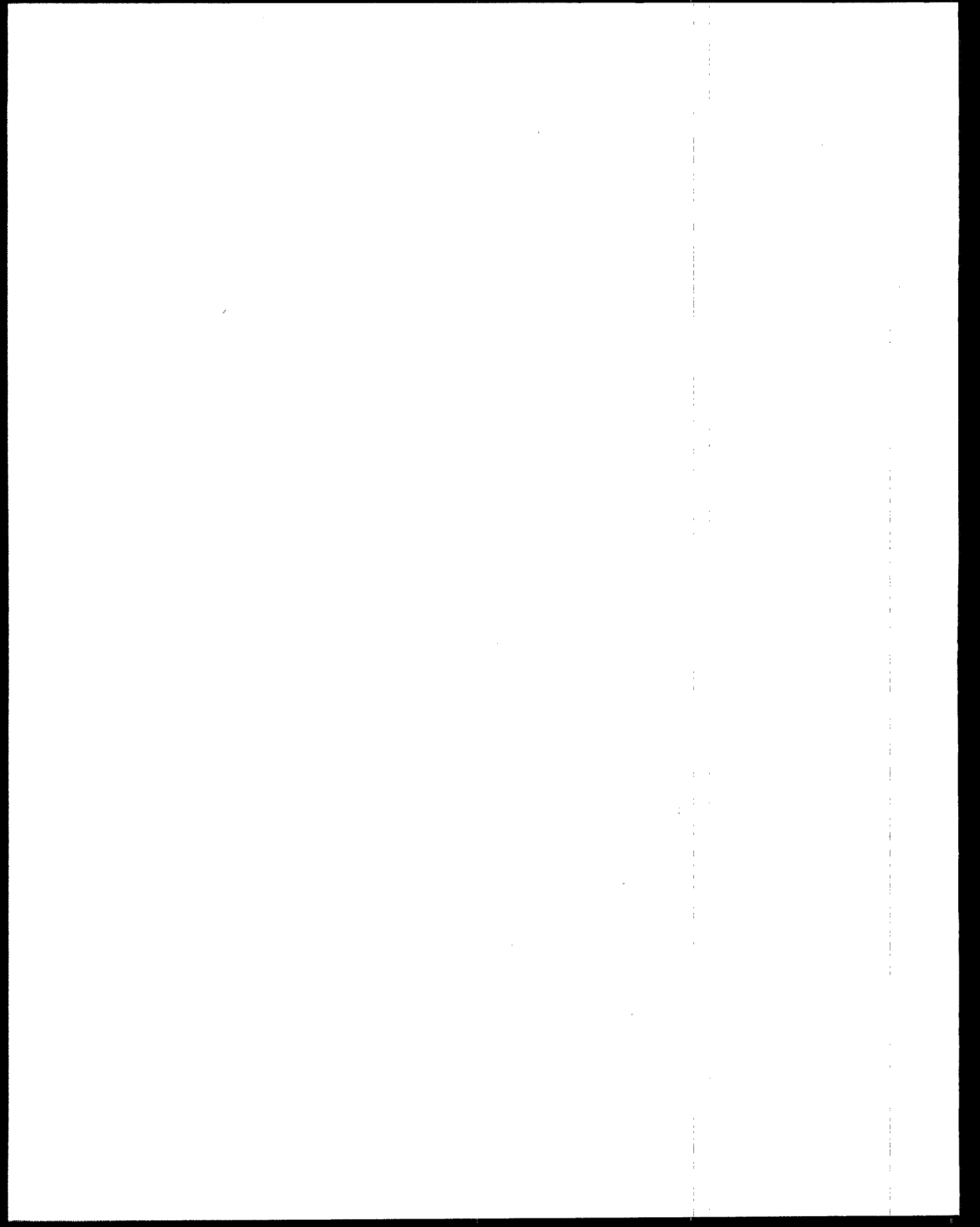




EPA's 33/50 Program Company Profile

Eastman Kodak Company





**EPA's 33/50 PROGRAM
COMPANY PROFILES**

This Company Profile is part of a series of reports being developed by EPA to highlight the accomplishments of companies participating in the 33/50 Program. The 33/50 Program is an EPA voluntary pollution reduction initiative that promotes reductions in direct environmental releases and offsite transfers of 17 high-priority toxic chemicals. The program derives its name from its overall goals — an interim goal of a 33% reduction by 1992 and an ultimate goal of a 50% reduction by 1995. The program uses 1988 Toxics Release Inventory (TRI) reporting as a baseline. In February, 1991, EPA began contacting the parent companies of TRI facilities that reported using 33/50 Program chemicals since 1988 to request their participation in the 33/50 Program. As of November, 1995, nearly 1,300 companies had elected to participate in the Program, pledging to reduce emissions of the 17 target chemicals by more than 380 million pounds by 1995. Companies set their own reduction targets, which may vary from the Program's national 33% and 50% reduction goals.

Industry exceeded the 33/50 Program's interim 33% reduction goal by more than 100 million pounds in 1992. National emissions of Program chemicals were reduced by an additional 100 million pounds in 1993, bringing total reductions since 1988 to more than 685 million pounds (46%). Facilities' TRI projections suggest that the Program's ultimate 50% reduction goal will be observed to have been achieved or exceeded in the 1994 TRI data, a full year ahead of schedule. The 1,300 companies enrolled in the 33/50 Program have accounted for most of the Program's pollution reductions. Representing just 15% of eligible companies and owning only a third of the facilities reporting Program chemicals to TRI, participants are responsible for 78% of the reductions since 1988 and 98% of the 100 million pounds reduced in 1993.

EPA is committed to recognizing companies for their participation in the 33/50 Program and for the emissions reductions they achieve. The Program issues periodic Progress Reports, in which participating companies are listed and highlighted. In addition, Company Profiles, such as this one, are being prepared to provide more detailed information about how companies have achieved their emissions reductions. Information presented in these profiles is drawn from a number of sources, including the company's written communications to the 33/50 Program, extensive interviews with company representatives, the annual TRI reports submitted by the company's facilities (including Pollution Prevention Act data reported to TRI in Section 8 of Form R), and, in many cases, site visits to one or more of the company's facilities. Mention of trade names, products, or services in this document does not convey, and should not be interpreted to convey, official EPA approval, endorsement, or recommendation.

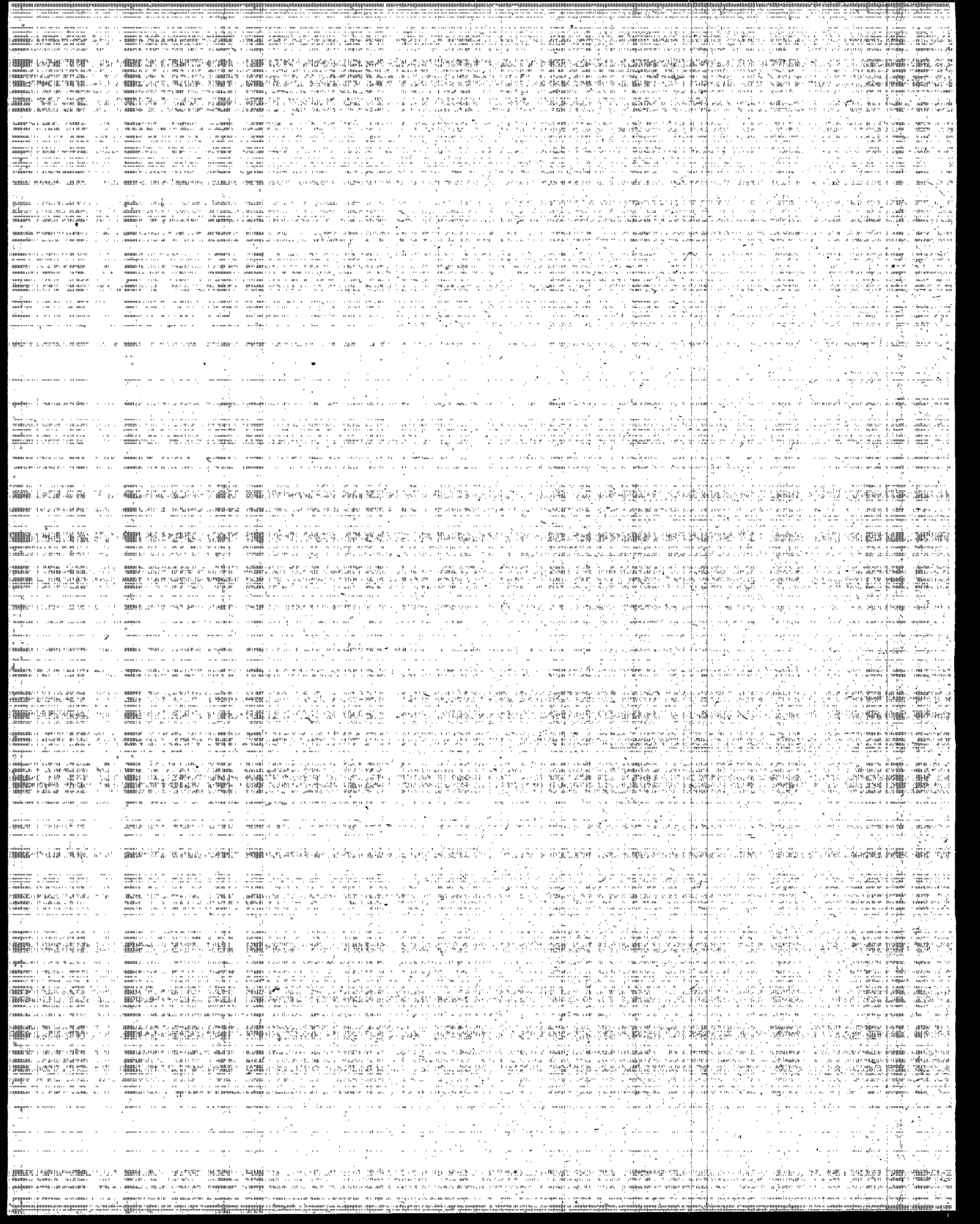
Copies of other 33/50 Program Company Profiles, as well as Reductions Highlights documents summarizing all of these Profiles, may be obtained by contacting the Program as specified in the box below. In addition, all written company communications to EPA regarding the 33/50 Program are available to the public upon request.

**17 PRIORITY CHEMICALS TARGETED
BY THE 33/50 PROGRAM**

BENZENE
CADMIUM & COMPOUNDS
CARBON TETRACHLORIDE
CHLOROFORM
CHROMIUM & COMPOUNDS
CYANIDES
DICHLOROMETHANE*
LEAD & COMPOUNDS
MERCURY & COMPOUNDS
METHYL ETHYL KETONE
METHYL ISOBUTYL KETONE
NICKEL & COMPOUNDS
TETRACHLOROETHYLENE
TOLUENE
1,1,1-TRICHLOROETHANE
TRICHLOROETHYLENE
XYLENES

* Also referred to as methylene chloride

For information on the 33/50 Program, contact the TSCA Hotline at (202) 554-1404 or contact 33/50 Program staff directly by phone at (202) 260-6907 or by mail at Mail Code 7408, Office of Pollution Prevention and Toxics, U.S. EPA, 401 M Street, SW, Washington, D.C. 20460.



Eastman Kodak Company

Eastman Kodak Company reduced releases and transfers of 33/50 Program Chemicals by 54% or 8 million pounds between 1988 and 1992. The installation of a dichloromethane recovery system and implementation of process changes at the Kodak Park facility in Rochester, NY accounted for 4.7 million pounds of this amount.

I. CORPORATE BACKGROUND

Eastman Kodak Company, headquartered in Rochester, NY, is the world's largest manufacturer of photographic products and supplies. The company's products include imaging equipment and supplies (37% of sales), information systems (20%), synthetic textile fibers, plastics and chemicals (18%), and health and pharmaceuticals (25%). U. S. based operations accounted for 55% of the company's revenues. On December 31, 1993, Eastman Chemical Company, a subsidiary of Eastman Kodak, was formed as a separate company.

The company has been known for its traditional film business, not only for amateur and professional photographers, but also for the motion picture industry, aerospace, and scientific research. Recently it has been moving into various forms of electronic data and imaging systems. Eastman Kodak has 13 facilities in the United States that report use of most chemicals in the 33/50 Program.

Eastman Kodak Company reduced releases and transfers of 33/50 Program Chemicals by 54% (8 million pounds) between 1988 and 1992.

Kodak's worldwide manufacturing of acetate film base takes place at the company's Rochester, NY plant site, called Kodak Park. Dichloromethane is the principal solvent used in the manufacture of cellulose triacetate base for films. The dichloromethane emissions reduction program at this facility are the focus of this study.

Table I at the end of this profile shows the data for releases and transfers of TRI chemicals on a company-wide basis, while Table II shows the data for two facilities discussed in this profile.

Releases of TRI Chemicals Reported by Eastman Kodak Company (1,000 lbs)

	1988	1992
<i>33/50 Program Chemicals</i>		
Benzene	84	50
Cadmium Compounds	1	NR
Carbon Tetrachloride	<1	NR
Chloroform	36	25
Chromium Compounds	63	38
Cyanides	<1	<1
Dichloromethane	9,172	4,523
Lead & Compounds	1	7
Methyl Ethyl Ketone	191	159
Methyl Isobutyl Ketone	1,686	58
Nickel Compounds	53	24
Tetrachloroethylene	4	NR
Toluene	2,258	1,240
1,1,1-Trichloroethane	394	146
Trichloroethylene	262	96
Xylenes	770	571
<i>33/50 Subtotal*</i>	14,976	6,937
<i>Other TRI Chemicals</i>	77,021	50,219
<i>Total*</i>	91,997	57,156

NR = Not reported to TRI, use below threshold.

* Columns do not sum total due to rounding.

Eastman Kodak Company and Eastman Chemical Company will report separately to TRI starting in 1994.

II. CORPORATE ENVIRONMENTAL STRATEGY

One of Eastman Kodak's nine Guiding Principles is "to operate [Kodak] plants and facilities in a manner that protects the environment and the health and safety of [its] employees, the public, and is efficient in the use of natural resources and energy." Under this principle, the company is

actively working to control and reduce multi-media releases and transfers worldwide.

Prior to setting its 33/50 Program goals, Eastman Kodak had developed the following explicit schedules for reduction and elimination of use and release of ozone depleting chemicals:

- Elimination of 1,1,1-trichloroethane by 1998, with an interim goal of a 50% reduction in releases and transfers by 1995. Kodak has since advanced this goal to elimination by 1995.
- Elimination of CFCs covered by the 1987 Montreal Protocol from use in direct manufacturing (i.e., not refrigeration) by 1995. The company set an interim goal of a 50% reduction by 1993.

1,1,1-Trichloroethane is an ozone depleting chemical that is also included in the 33/50 Program's list of 17 targeted chemicals. CFCs (chlorofluorocarbons) are not a 33/50 Program targeted chemical, and companies were not required to report releases and transfers of CFCs to TRI in 1988, the base year of the 33/50 Program.

Eastman Kodak has developed a set of nine broad principles representing its vision of environmental commitment and responsibility.

The company also measures its pollution prevention progress and reports annually on its environmental record to shareholders and the general public. In addition, the company is committed to recognizing and responding to community concerns about its operations.

Eastman Kodak also places emphasis on shared responsibility of companies, industries, and government in safeguarding the workplace and the environment. To this end, the company subscribes to the Chemical Manufacturers Association's "Responsible Care" Pollution Prevention Code. The company also participates in many governmental, industry, and trade groups dealing with environmental issues.

III. 33/50 PROGRAM GOALS

In May of 1991, Eastman Kodak set a corporate goal to reduce total releases and transfers of 33/50 Program chemicals by 55% by 1995 from the 1988 TRI baseline. Kodak's decision to participate in the 33/50 Program was made by the company's Management Council on Environmental Responsibility, which provides direction and review of health, safety, and environmental policies and practices for the company worldwide.

The company's goal translates to a pledged reduction of over 8.2 million pounds. The company stated that it planned to achieve this reduction through the following priority sequence: source reduction, solvent recovery, other methods of recycling or re-use treatment, and disposal.

The company developed these goals in conjunction with permitting requirements for air emissions of toxic chemicals at its facilities, as well as its goals for ozone depleting chemicals developed in conjunction with the Montreal Protocol.

IV. RECOVERY OF DICHLOROMETHANE AT THE KODAK PARK FACILITY

Kodak Park is a large manufacturing facility adjacent to corporate headquarters in Rochester, NY. Among its operations is film base manufacturing which uses large quantities of dichloromethane. The facility uses dichloromethane as the principal solvent in manufacturing cellulose triacetate-based films, for modern cameras. In 1988, 95% of the dichloromethane used at the facility was reused or recycled and only 5% was released or transferred off-site. However, this 5% constituted 9.0 million of the 24.6 million pounds (37%) of total TRI releases and transfers for the facility in 1988. Over 97% of the total release of dichloromethane from this operation are air emissions.

Dichloromethane has been the solvent of choice in film manufacturing since 1944, when it was substituted for acetone, which is more flammable. To produce the film base, cellulose triacetate is dissolved in a solvent mixture containing mostly dichloromethane, resulting in a solution with the consistency roughly of honey. The solution, known as "dope" is filtered and then thinly coated onto large highly-polished casting wheels in equipment that is 60 feet long and more than 3 stories high

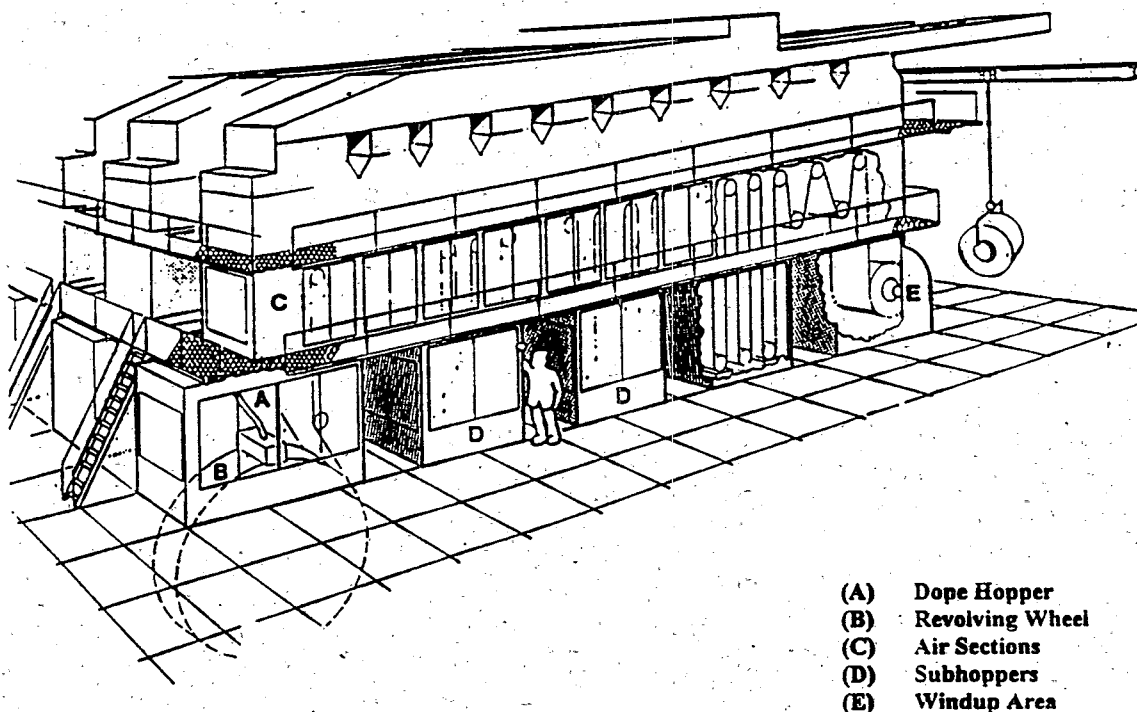
(see diagram). The solvents gradually evaporate, leaving the film base behind. Finally, after curing and hardening steps, this clear film is coated with light-sensitive chemicals to give it photographic properties.

In the late 1980s Eastman Kodak initiated a program to reduce the air emissions of dichloromethane from its Kodak Park facility. This was part of a program to expand its film base manufacturing. First, the company explored substitutes for this solvent in its film making operations. Various solvents have been studied but, thus far, none has been found to be suitable, mostly because of inadequate solvent capability for the cellulose triacetate, increased flammability and toxicity, and increased potential for environmental impact.

The next option explored was modifying or substituting cellulose triacetate with other materials to make the base of the film, in the hope of finding one that would allow the use of other solvents. To date, the company has been unable to identify a satisfactory substitute material with the desired mechanical properties of cellulose triacetate. Modern cameras are built around the properties of the film as currently used; film with different mechanical properties can damage delicate camera parts or, alternatively, may not be sturdy enough for rigorous use.

While the company continues to search for more environmentally desirable alternatives to dichloromethane at Kodak Park, it has taken an interim step to increase recovery of dichloromethane from the current film base processes.

Acetate Film Base Manufacturing Machine



In 1988 and 1989 the Company negotiated a permit from the New York State Department of Environmental Conservation to allow expansion of film base manufacturing at the Kodak Park. The permit included a requirement that Kodak implement measures developed previously to reduce dichloromethane air releases by 30% before expansion took place, and reduce fugitive air emissions by 50% by June 1996. With substitutions deemed infeasible at the time of permitting, the company decided to implement a program to reduce dichloromethane emissions through several equipment and process modifications, described below.

The 33/50 Program has accelerated the rate of reductions by providing a framework for Eastman Kodak to implement its pollution prevention program in concert with a common, recognized national goal and timetable.

The company identified two sources of air emissions to target for reduction: point source air releases from a solvent recovery process resulting from inefficiencies in extracting vapor from the exiting air stream, and fugitive air emissions attributable to leaks in equipment, handling or storage.

To reduce both types of air releases, the company installed a closed loop recovery system to capture and reclaim solvent vapors for reuse. The solvent recovery system involves collecting solvents evaporating from the film base from enclosures around the processing machinery, along with machine air. The system cools the vapor/air mixture to approximately -85°F and condenses the vapor out of the air. The air is returned to the machinery enclosures. The liquids are pumped to a distillation area for extraction of the individual solvent components, which are returned for use in formulation. As a result of this addition of on-site recycling, the company now recaptures 98.9% of the dichloromethane used in film base manufacturing.

To further reduce fugitive air emissions, the company implemented an aggressive monitoring and preventive maintenance program. The company performs leak and equipment inspections more

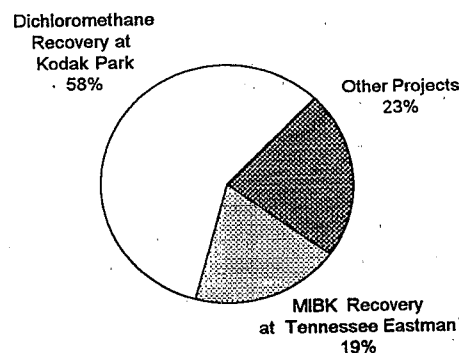
often and more rigorously. It also replaces defective equipment parts as early as possible.

These measures have lead to a steady decline in releases and transfers of dichloromethane from 9.0 million pounds in 1988 to 4.4 million pounds in 1992, a decrease of more than 50%. The company anticipates that by 1996 it will be able to undertake source reduction activities in the form of product design changes and raw materials substitutions to achieve more than a 70% reduction in dichloromethane releases and transfers, and also reach a 99% reuse/recycle efficiency of the chemical.

IV. PROGRESS TOWARDS 33/50 REDUCTION GOALS

Eastman Kodak has reduced company-wide releases and transfers of 33/50 chemicals by 54% from 1988 to 1992, through elimination of over 8 million pounds of releases and transfers. Over the same time period, the Company reduced total releases and transfers of all TRI chemicals by 34.8 million pounds, a reduction of 38%. Of this amount, the dichloromethane process changes described above at the Kodak Park facility accounted for 4.7 million pounds, or 13% of the reduction.

**Distribution of Reductions
of 33/50 Chemicals**



Similar solvent recovery techniques have been employed at the company's Kingsport, Tennessee facility (an Eastman Chemical plant) to reduce releases and transfers of methyl isobutyl ketone (MIBK) by over 1,500,000 pounds.

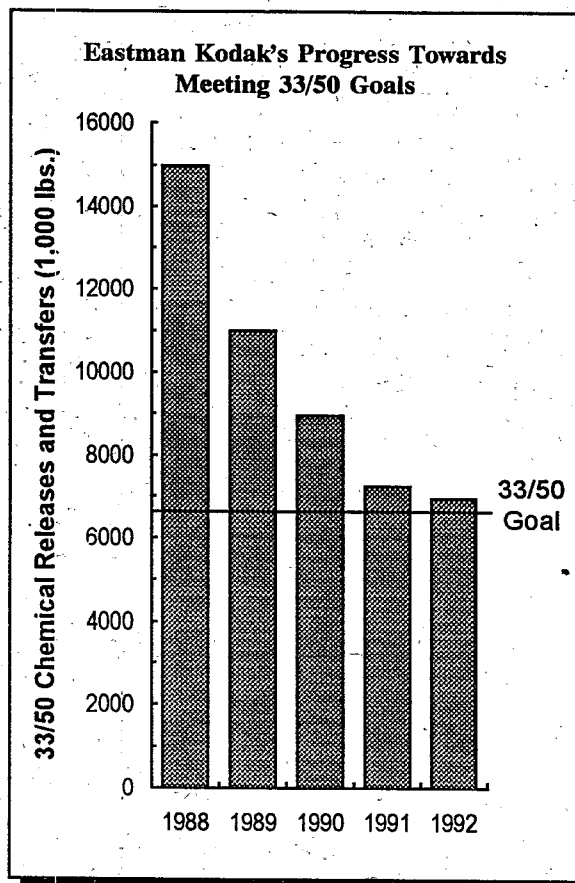
While the company expects to expand its US manufacturing operations over the next few years, it anticipates exceeding its 55% 33/50 Program goal by the end of 1995.

In addition, as shown in Table III, company-wide waste generation of 33/50 Program chemicals declined from 1991 to 1992 by more than 11.1 million pounds (27%). Moreover, in 1992, the company projected an additional 1 million pound drop by 1994, an objective company representatives say Kodak has achieved. A drop in waste generation occurring at the same time as anticipated increases in production suggests that the on-site recycling solvent recovery processes will become more efficient and that the implementation of source reduction activities may take place prior to 1994.

V. SUMMARY OF KODAK'S EXPERIENCE

The Eastman Kodak Company has significantly reduced its releases and transfers of TRI chemicals, especially of those covered by the 33/50 Program. The company has established a 55% release and transfer reduction goal for 1995 and expects to exceed it. Much of this reduction already has been achieved, primarily through improved solvent recovery systems, although the company has plans to implement various source reduction techniques to reach its final goal.

Although part of the company's 33/50 Program goals were created from company projections and permit requirements already in place at the time of the program's inception, Eastman Kodak's experience with the 33/50 Program has been a positive one.



The 33/50 Program has accelerated the rate of reductions by providing a framework for Eastman Kodak to implement its pollution prevention program in concert with a common, recognized national goal and timetable. The 33/50 Program also fits well with Eastman Kodak's principle of shared responsibility in environmental issues by allowing industry and government to work together to create voluntary reductions, rather than relying on mandated solutions.

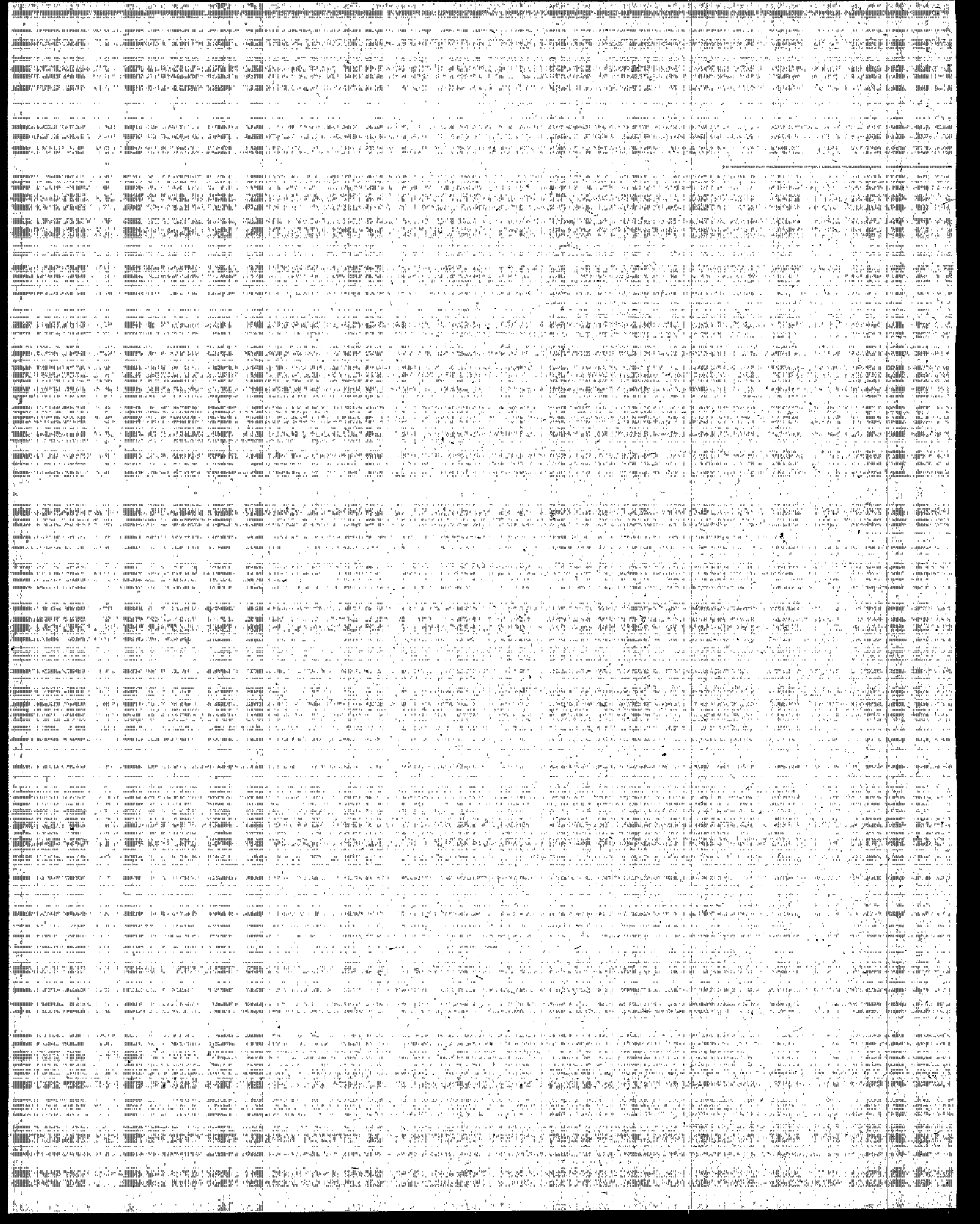


Table I
Eastman Kodak Company
Releases and Transfers of TRI Chemicals, 1988-1992

Chemical	Year	Total Air Emissions (pounds)	Surface Water Discharges (pounds)	Releases to Land (pounds)	Transfers to POTW (pounds)	Transfers Off-site for Treatment/Disposal/Other (pounds)	Total Releases and Transfers (pounds) (1)	Percent Change 1988-1992 Total Releases and Transfers
Dichloromethane	1988	8,976,062	21,058	120,000	6	54,486	9,171,612	
	1989	7,060,965	8,110	1,500	20	115,920	7,186,515	
	1990	5,766,137	4,106	9,200	3	16,671	5,796,117	
	1991	4,726,702	6,402	0	0	40,321	4,773,425	
	1992	4,404,803	7,667	55	760	109,377	4,522,662	-51%
Other 33/50 Chemicals	1988	5,318,183	44,246	60,332	77,332	303,806	5,803,899	
	1989	3,187,835	15,836	70,512	9,225	519,994	3,803,402	
	1990	2,659,918	10,906	182,186	3,394	289,690	3,146,094	
	1991	2,332,340	24,686	46,005	9,828	54,109	2,466,968	
	1992	2,152,444	20,218	45,388	4,468	192,310	2,414,828	-58%
Total 33/50 Program Chemicals	1988	14,294,245	65,304	180,332	77,338	358,292	14,975,511	
	1989	10,248,800	23,946	72,012	9,245	635,914	10,989,917	
	1990	8,426,055	15,012	191,386	3,397	306,361	8,942,211	
	1991	7,059,042	31,088	46,005	9,828	94,430	7,240,393	
	1992	6,557,247	27,885	45,443	5,228	301,687	6,937,490	-54%
Non 33/50 Program Chemicals	1988	71,059,193	2,115,018	166,930	1,532,411	2,147,813	77,021,365	
	1989	68,963,802	3,649,009	208,644	1,030,306	2,561,588	76,413,349	
	1990	60,130,479	3,098,574	329,733	821,790	1,805,612	66,186,188	
	1991	57,969,542	1,187,805	118,886	986,035	925,142	61,187,410	
	1992	46,823,108	1,180,781	206,937	817,330	1,190,803	50,218,959	-35%
All TRI Chemicals	1988	85,353,438	2,180,322	347,262	1,609,749	2,506,105	91,996,876	
	1989	79,212,602	3,672,955	280,656	1,039,551	3,197,502	87,403,266	
	1990	68,556,534	3,113,586	521,119	825,187	2,111,973	75,128,399	
	1991	65,028,584	1,218,893	164,891	995,863	1,019,572	68,427,803	
	1992	53,380,355	1,208,666	252,380	822,558	1,492,490	57,156,449	-38%
Percent Change, 1988-1992								
33/50 Program Chemicals		-54%	-57%	-75%	-93%	-16%	-54%	
Non 33/50 Program chemicals		-34%	-44%	24%	-47%	-45%	-35%	
All TRI Chemicals		-37%	-45%	-27%	-49%	-40%	-38%	

(1) Total Releases and Transfers for 1991 and 1992 do not include on- or off-site recycling or energy recovery.

Table II

**Eastman Kodak Company, Selected Facilities
Releases and Transfers of TRI Chemicals, 1988-1992**

Chemical	Year	Surface		Releases to Land (pounds)	Transfers to POTW (pounds)	Off-site	
		Total Air Emissions (pounds)	Water Discharges (pounds)			for Treatment/ Disposal/Other (pounds)	Total Releases and Transfers (pounds) (1)
KODAK PARK - ROCHESTER, NY							
Dichloromethane	1988	8,900,000	21,000	120,000	0	3,413	9,044,413
	1989	7,020,000	8,100	1,500	0	69,251	7,098,851
	1990	5,730,000	4,100	9,200	0	2,050	5,745,350
	1991	4,670,000	6,400	0	0	221	4,676,621
	1992	4,380,000	7,600	55	0	372	4,388,027
Other 33/50 Program Chemicals	1988	133,531	13,056	6,170	2,600	9,915	1,365,272
	1989	1,102,317	13,564	4,199	431	139,226	1,259,737
	1990	672,945	8,767	61	238	5,951	687,962
	1991	692,867	15,643	0	135	1,481	710,126
	1992	536,736	17,148	1,533	56	6,967	562,440
Total 33/50 Program Chemicals	1988	10,233,531	34,056	126,170	2,600	13,328	10,409,685
	1989	8,122,317	21,664	5,699	431	208,477	8,358,588
	1990	6,402,945	12,867	9,261	238	8,001	6,433,312
	1991	5,362,867	22,043	0	135	1,702	5,386,747
	1992	4,916,736	24,748	1,588	56	7,339	4,950,467
Non 33/50 Program Chemicals	1988	13,480,263	579,299	38,940	1,203	42,520	14,142,225
	1989	11,146,442	396,130	2,773	4,514	629,497	12,179,356
	1990	9,279,148	322,828	3,343	2,093	5,192	9,612,604
	1991	8,363,035	610,960	396	3,138	9,296	8,986,825
	1992	8,148,227	715,034	0	2,886	4,846	8,870,993
All TRI Chemicals	1988	23,713,794	613,355	165,110	3,803	55,848	24,551,910
	1989	19,268,759	417,794	8,472	4,945	837,974	20,537,944
	1990	15,682,093	335,695	12,604	2,331	13,193	16,045,916
	1991	13,725,902	633,003	396	3,273	10,998	14,373,572
	1992	13,064,963	739,782	1,588	2,942	12,185	13,821,460

Table II
Eastman Kodak Company, Selected Facilities
Releases and Transfers of TRI Chemicals, 1988-1992

Chemical	Year	Total Air Emissions (pounds)	Surface Water Discharges (pounds)	Releases to Land (pounds)	Transfers to POTW (pounds)	Transfers Off-site for Treatment/ Disposal/Other (pounds)	Total Releases and Transfers (pounds) (1)
TENNESSEE EASTMAN CO. - KINGSPORT, TN							
Methyl isobutyl ketone	1988	1,527,000	23,000	75	0	0	1,550,075
	1989	135,000	8	0	0	0	135,008
	1990	375,000	18	0	0	0	375,018
	1991	240,000	1,200	29	0	0	241,229
	1992	27,000	560	3	0	0	27,563
Other 33/50 Program Chemicals	1988	1,388,976	7,973	36,270	2,946	65,601	1,501,766
	1989	911,995	1,745	35,729	1,332	226,683	1,177,484
	1990	826,766	1,802	155,000	3	12,673	996,244
	1991	685,273	7,491	35,200	0	7,449	735,413
	1992	1,050,684	2,406	35,800	1,069	72,662	1,162,621
Total 33/50 Program Chemicals							
	1988	2,915,976	30,973	36,345	2,946	65,601	3,051,841
	1989	1,046,995	1,753	35,729	1,332	226,683	1,312,492
	1990	1,201,766	1,820	155,000	3	12,673	1,371,262
	1991	925,273	8,691	35,229	0	7,449	976,642
	1992	1,077,684	2,966	35,803	1,069	72,662	1,190,184
Non 33/50 Program Chemicals	1988	43,162,082	1,505,026	75,080	27,929	800,249	45,570,366
	1989	44,848,032	3,019,351	163,302	12,224	842,118	48,885,027
	1990	39,392,914	2,585,191	290,759	14,700	17,203	42,300,767
	1991	39,192,588	373,915	46,884	10,731	17,971	39,642,089
	1992	30,846,786	298,588	160,640	3,375	57,762	31,367,151
All TRI Chemicals	1988	46,078,058	1,535,999	111,425	30,875	865,850	48,622,207
	1989	45,895,027	3,021,104	199,031	13,556	1,068,801	50,197,519
	1990	40,594,680	2,587,011	445,759	14,703	29,876	43,672,029
	1991	40,117,861	382,606	82,113	10,731	25,420	40,618,731
	1992	31,924,470	301,554	196,443	4,444	130,424	32,557,335

(1) Total Releases and Transfers for 1991 and 1992 do not include on- or off-site recycling or energy recovery.

Table III
Eastman Kodak Company
Pollution Prevention Act Reporting, 1991-1992 Data and 1994 Projections

Chemical	Year	Recycled			Energy Recovery		Treated		Quantity Released		Percent Change		Total Production Related Wastes			Percent Change
		On-Site (pounds) (1)	Off-Site (pounds)	On-Site (pounds)	On-Site (pounds)	Off-Site (pounds)	On-Site (pounds)	Off-Site (pounds)	1991-1994	1994	1991-1994	1994	Production Related Wastes (pounds)	1991-1994	1994	
<u>33/50 Program Chemicals</u>	1991	2,958,850	222,305	12,993,370	742,101		17,705,841	85,067	7,144,011				41,851,545			
	1992	138,671	140,270	11,733,600	985,131		10,807,128	266,168	6,644,218				30,715,186			
	1994	171,067	155,270	12,073,600	982,662		10,728,327	462,356	5,145,327		-28%		29,718,609			-29%
Non 33/50 Program Chemicals	1991	135,518,939	627,640	16,332,691	1,960,193		111,303,607	1,869,761	59,436,327				327,049,158			
	1992	1,433,931	735,400	23,156,796	3,112,653		105,080,549	1,982,141	48,869,095				184,370,565			
	1994	1,677,096	735,800	22,004,575	3,073,043		107,879,853	1,167,068	48,488,759		-18%		185,026,194			-43%
All TRI Chemicals	1991	138,477,789	849,945	29,326,061	2,702,294		129,009,448	1,954,828	66,580,338				368,900,703			
	1992	1,572,602	875,670	34,890,396	4,097,784		115,887,677	2,248,309	55,513,313				215,085,751			
	1994	1,848,163	891,070	34,078,175	4,055,705		118,608,180	1,629,424	53,634,086		-19%		214,744,803			-42%
Percent Changes, 1991-1994																
33/50 Program chemicals		-94%	-30%	-7%	32%		-39%	444%	-28%							-29%
Non 33/50 Program chemicals		-99%	17%	35%	57%		-3%	-38%	-18%							-43%
All TRI Chemicals		-99%	5%	16%	50%		-8%	-17%	-19%							-42%

(1) Recycled On-Site for 1992 and 1994 does not include closed loop recovery system recycling.